## REMARKS

Claims 2 and 8-12 were examined. Claim 2 has been cancelled by amendment.

In the office action mailed July 5, 2007 (the "Office Action"), the Examiner rejected claim 2 under 35 U.S.C. 103(a) as being unpatentable over Liu et al., A Route-Neighborhood-Based Metaheuristic For Vehicle Routing Problem With Time Windows (the "Liu reference") in view of U.S. Patent Application Publication no. 2001/0049619 to Powell et al. (the "Powell reference"). The Examiner further rejected claims 8-10 under 35 U.S.C. 103(a) as being unpatentable over Solomon, Algorithms For the Vehicle Routing and Scheduling Problems With Time Window Constraints (the "Solomon reference") in view of the Witt Article, International Publication No. WO 00/688569, and International Publication No. WO 00/68856 to Webvan Group, Inc. (the "Webvan references," collectively). Claims 11 and 12 were rejected under 35 U.S.C. 103(a) as being unpatentable over the Solomon reference in view of the Webvan references.

The Liu reference describes a Route-Neighborhood-based two-stage metaheuristic having a neighborhood structure based on a relationship between routes and nodes. A nested parallel route construction and end-effect handling are used to enhance solution quality. The material cited by the Examiner from the Liu reference describes use of a nested parallel route construction technique for scheduling unrouted customers into existing partial routes. The parallel route construction technique is followed by a sequential construction procedure to schedule remaining unrouted customers. The parallel and sequential construction procedures are repeated until all of the customers are routed.

The Solomon reference describes a tour-building algorithm for vehicle routing and scheduling problems with time window constraints (VRSPTW) that utilizes both distance and time dimensions in the heuristic process to provide flexible methods that can accommodate time window constraints. The material cited by the Examiner describes insertion heuristics that are used to insert a new customer into a current partial route between two adjacent customers. The insertion heuristics described attempt to maximize the benefit of servicing a customer on the partial route being constructed. For example, the best insertion place for an unrouted customer is the one that minimizes the weighted combination of its distance and time insertion, that is, the

one that minimizes a measure of the extra distance and extra time required to visit the inserted customer.

The Powell reference and the Webvan references have been discussed in previously filed responses, and in the interest of brevity, will not be discussed in detail in the present response.

Amended claim 8 is patentable over the Solomon reference in view of the Webvan references, and is also patentable over the Liu reference in view of the Powell reference. Claim 8 has been amended to recite that two different techniques are used to assign an order to an opening based on whether a customer has (1) specified both an appointment window and an opening for the order and (2) specified the appointment window and not the opening for the order. As amended claim 8 recites, under the first condition a list of schedulable time blocks for a shift are identified in the opening, a time range defined by the overlap of the opening and the appointment window is obtained, and the order is assigned to the opening if a schedulable time block from the list of schedulable time blocks includes the opening and the opening is within the time range. Under the second condition, however, a listing of openings for overlap with the specified appointment window is checked, a list of schedulable time blocks is generated if there is no overlap, and the order is assigned to the schedule if there is an opening in the list of openings that overlap with the appointment window or an opening in the list of schedulable time blocks that overlaps with the appointment window. Moreover, amended claim 8 recites that the order is assigned to a schedule having an opening identified by iterating through a list of shifts potentially having sufficient time to accommodate the order and through a list of virtual free time blocks for each shift in the list of shifts, where a virtual time block represents an amount of time in which an order may be assigned by bumping assigned orders in a shift.

The Liu, Powell, Solomon, and Webvan references, alone or in combination, fail to teach or suggestion the combination of limitations recited in amended claim 8. In particular, none of these references teach assigning an order using two different techniques based on whether the customer has specified both an appointment window and an opening for the order or specified the appointment window and not the opening. Nor would one ordinarily skilled in the art be motivated to combine the teachings of the references because of the conflicting techniques described in the cited references to schedule an unrouted customer.

For the foregoing reasons, claim 8 is patentable over the Solomon reference in view of the Webvan references, and is further patentable over the Liu reference in view of the Powell reference. Claims 9-12, which depend from claim 8, are similarly patentable based on their dependency on allowable claim 8. Therefore, the rejection of claims 8-12 under 35 U.S.C. 103(a) should be withdrawn.

All of the claims pending in the present application are in condition for allowance. Favorable consideration and a timely Notice of Allowance are earnestly solicited.

Respectfully submitted,

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